

CENTRAL INTELLIGENCE AGENCY

REPORT

INFORMATION REPORT

CD NO.

25X1

COUNTRY Germany (Russian Zone)

DATE DISTR. 22^{25X1} March 1951

SUBJECT Coal-Dust Firing Locomotives

NO. OF PAGES 2

PLACE
ACQUIRED

NO. OF ENCLS. 25X1
(LISTED BELOW)

DATE OF INFO.

SUPPLEMENT TO
REPORT NO.

Document No. 002
 No Change In Class. ☐
☐ Declassified
 Class. Changed To: TS S (C)

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE ACT 50 U.S.C. 31 AND 32, AS AMENDED. ITS TRANSMISSION OR THE REVELATION OF ITS CONTENTS TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. REPRODUCTION OF THIS PAGE IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

1. There were 36 coal-dust firing locomotives, including six converted S-10 type locomotives and 30 C-12 type locomotives, available in the Soviet Zone of Germany, on 28 December 1950. (1) As a result of further experiments and trial runs coal-dust firing locomotives will be equipped with iron fire boxes only, since the copper fire boxes were subject to excessive corrosion due to the uneven employment of heat and the high content of sulphur in brown coal. (2) The trial runs with coal-burning locomotives were satisfactory. However, in the Halle district there were difficulties on steep grades with 1,000-ton trains. An evaluation of the trial runs showed that an S10 type locomotive converted to coal-dust firing consumes 26 to 29 tons of coal dust for one million ton-kms while a locomotive burning brown coal briquettes needed 70 to 100 tons of coal for the same performance. (3) Only about half of the 36 locomotives available which are converted to coal-dust firing are being employed, the others are kept in reserve because of a shortage of coal-dust. (4) It is planned to convert another 100 locomotives to coal-dust firing in 1951. (5)
2. Kramer, (fnu), director general of the Soviet Zone Railroads, after returning from Moscow shortly before Christmas, said in a conference of railroad officials held on 3 January 1951 that the conversion of locomotives to coal-dust firing had met with considerable delay and even with partial failure. However, the experts of Department VIII (Planning and Statistics) concordantly are of the opinion that the speedy conversion to the employment of coal-dust firing locomotives was prevented only by a shortage of materials which could not be overcome. They pointed to the fact that sufficient coal dust is not even available for those locomotives that have been converted to coal-dust firing.
3. Apart from saving of fuel, the coal-dust firing locomotives are superior to standard locomotives inasmuch as their pre-heating requires only 20 minutes as against four to six hours required for standard locomotives, they have a range of 2,000 km without refueling, there are no sparks and cinders and the work of the engine crews is greatly facilitated. Besides all these advantages it is possible to use low-quality brown-coal dust with a high percentage of water.

Comments.

- (1) Experiments with coal-dust firing locomotives were reported previously. 25X1
 S-10 type locomotives are heavy express train locomotives with five wheel sets, three of them coupled, and with an axle pressure of 17 tons; G-12 type locomotives are heavy freight train locomotives with six 25X1

CLASSIFICATION ~~SECRET~~ ~~CONFIDENTIAL~~ U.S. OFFICIALS ONLY

[illegible]

25 YEAR RE-REVIEW

SECRET/CONTROL - U.S. OFFICIALS ONLY

CENTRAL INTELLIGENCE AGENCY

-2-

25X1

- (2) wheel sets, five of them coupled, and with an axle pressure of 16 tons.
- (3) The same figures were reported previously.
- (4) The shortage of coal dust is also pointed out in the technical press. Also see paragraph 2 of the present report. On 23 December 1950 the Soviet Zone railroads stocks of coal dust amounted to only 74 tons at a rate of consumption of 77 tons per day.
- (5) So far the conversion of only 70 locomotives had been envisaged. Most of this work is to be performed in the Stendal railroad repair shop.
- (6) The views on the advantages of the coal-dust firing locomotive still differ. A definite comment cannot be given before further trials have been made. With regard to the acute shortage of hard coal and the disadvantages of brown coal briquette firing, the use of coal dust firing locomotives is believed to be advantageous.

25X1

25X1

25X1

25X1

SECRET-CONTROL/US OFFICIALS ONLY